

Norman H. Bangerter, Governor Dee C. Hansen, Executive Director Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

March 28, 1985

Mr. Steven D. Taylor
Division Environmental Engineer
Kennecott
Utah Copper Division
P. O. Box 31838
Salt Lake City, Utah 84131-0838

Dear Mr. Taylor:

RE: Geotechnical Evaluation Embankment Raising Activities for Evaporation Ponds, Bingham Canyon Mine, ACT/035/002, Salt Lake County, Utah

The Division has completed the review of the October 6, 1984 Dames and Moore report for elevating the dikes for two of the old Bingham Canyon evaporation ponds. The Division expresses its apology for the excessive delay in responding to the Company's submittal. Unfortunately, other priorities have prevented a more expeditious review.

Conceptually, the Division has no problems concerning the design parameters and conditions for construction of the dikes expansion. However, the report fails to indicate or provide specific information addressing the quality of water being evaporated in the ponds. No information or estimate was provided to ascertain how much of the water directed into the ponds is infiltrating into the ground water system. The ponds are located on top of an alluvial fan. This facies appears to be highly porous and permeable. Ground water most likely occurs below the test borings and may be readily recharged from the surface. Depending on the quantity of the water contained within the ponds, a potential for infiltration into and recharging the subsurface alluvial aquifer appears prevalent. A comparison of water quality from within the evaporation ponds with that obtained from the associated ground water alluvial aguifer, could provide information as to any potential ground water contamination problems.

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The Division requests that Kennecott provide copies of any available water quality analyses for water discharged into the evaporation ponds and any available analyses which would reflect the quality of the ground water in the alluvial aquifer beneath the ponds. Please include any records of water analysis of seepage from the evaporation ponds as well. If possible, please provide the Division with a response to the information requested above by April 22, 1985.

Thank you for your cooperation and attention to these concerns. Please contact me or D. Wayne Hedberg should you have any questions or concerns.

Sincerely,

Summer 1 B rugher Lowell P. Braxton

Administrator
Mineral Resource Development
and Reclamation Program

DWH/btb

cc: Ron Daniels
Randy Harden
Sue Linner
Rick Smith
Tom Suchoski
John Whitehead

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